

PYROS KINETIX READER FOR CONDUCTING ASSAYS

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ABSTRACT OF THE DISCLOSURE

10 An analytical device that can be used to conveniently and accurately assay plural vessels. In one exemplary embodiment, a pair of LED sources provides illumination through a pair of radial waveguides to plural vessels arranged in a pair of substantially concentric and circular rows about the LED sources. A light pipe receives light transmitted through a vessel from each radial waveguide and reflects the received light downward to a single printed circuit board that contains a photodiode for each light pipe, as well as processing circuitry. The first LED source/radial waveguide optical is used to confirm the presence of a vessel, and the second is used to perform, e.g., turbidometric and/or colorimetric assays upon an
15 analyte within the vessel. The vessel is incubated in a vessel support that includes a heat conducting base and a heat insulating cover. Heat is supplied by a DC heater.

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